



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,062	08/04/2003	Clive M. Philbrick	ALA-008G	5537
24501	7590	10/13/2010		
MARK A LAUER 6601 KOLL CENTER PARKWAY SUITE 245 PLEASANTON, CA 94566			EXAMINER DENNISON, JERRY B	
			ART UNIT 2443	PAPER NUMBER
			MAIL DATE 10/13/2010	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/634,062

Applicant(s)

PHILBRICK ET AL.

Examiner

J Bret Dennison

Art Unit

2443

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 and 25-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29 is/are allowed.
- 6) ☒ Claim(s) 1, 4-7, 10-17, 22, 25-27 and 30-37 is/are rejected.
- 7) ☒ Claim(s) 2, 3, 8, 9, 18-21, 23 and 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 8/17/2010
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Action is in response to the Amendment for Application Number 10/634,062 received on 9/01/2009.
2. Claims 1-40 are presented for examination.

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:
4. Claims 1-23, 25-40 recite the terms "hybrid storage area", "re-assembly storage area", "non-re-assembly storage area", "virtual connection identifier". Applicant's specification does not provide the proper antecedent basis for this terminology.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 4-7, 14-17, 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

For the following rejection(s), reference will be made to the Request to Invoke Interference, where Applicant maps the claim limitations to portions of Applicant's provisional application 60/098,296.

6. Claims 4-5 recite limitations regarding the receipt of a code associated with the packet in which the code indicates that the data portion is either reassembleable or not reassembleable. The mapped portions in the provisional do not provide the proper support for this subject matter. The portions do not disclose any actual "receipt" of a code nor do they disclose any indication as to whether the data is reassembleable or not. Summarizing a header's type into a single status word does not appear to equate to receiving a code that indicates that the data packet is reassembleable or not. Indicating that the header specifies a fast-path connection does not appear to specify if the data is reassembleable or not. The portions mapped also do not specify the type of data storage area to be a re-assembly data storage area or a non-re-assembly data storage area. The portions merely indicate small and large buffers and has nothing to do with whether they are re-assembly or non-re-assembly data storage areas.

7. Regarding claim 6, the claim requires receiving a code *with* the first packet, the code indicting that the first packet does not contain a data portion. The mapped portions do not appear to disclose this subject matter. A field in a header buffer does not equate to the actual receipt of a code with the packet. The rest of the portions mapped discuss the general examining of a frame header to generate an event from it and has no relevance to whether a code received with the packet indicates that the packet does not contain a data portion.

8. Regarding claim 7, the claim requires receiving a code *with* the second packet that indicates that the packet is smaller than said predetermined size. It appears from Applicant's mappings that there is no code provided and the relied upon "length" is simply determined based on the data of the packet that it holds.

9. Regarding claim 14, the mapped portions do not indicate how said first storage area identifier is identifiable by a descriptor in said data structure. The mapped portions recite adding the data buffer handle and the data buffer address to a queue, and that two values are extracted each time at dequeuing, but there doesn't appear to be a descriptor used in order to identify the first storage area identifier in a data structure.

10. Regarding claim 15, the claim requires the use of the descriptor to identify said first storage area for storing a portion of said first packet. The mapped portions do not recite an index used, but rather just copying the data buffer handle into a header buffer and returning it to the host.

11. Regarding claim 16, the claim requires configuring a descriptor to store said index of said first storage area identifier to inform said host computer of the use of the storage area. The mapped portions in the provisional do not provide the proper support for this subject matter. It appears that the mapped portions relate to the INIC maintaining a queue and adding to the queue when the host writes to the header buffer address registers, which appears to not equate to informing the host computer of the use of said first storage area. Rather it appears that the INIC simply keeps track of when the host computer writes to one of the header buffer address registers. This has

nothing to do with informing the host computer of the use of said first storage area to store one of said header portion and said data portion.

12. Regarding claim 22, the claim requires the receipt of a virtual connection identifier wherein a communication flow can be identified by the virtual connection identifier. The mapped portions in the provisional do not provide the proper support for this subject matter, as there is no mention of a virtual connection identifier in order to identify the communication flow.

13. Claim 17 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 17 recites the receipt of a third packet including data and a Transmission Control Protocol (TCP) header, and storing the data of the third packet in the third storage area...the application denoted by the TCP header, the third storage area containing no TCP headers. Applicant points to the '296 app. on page 21, line 3 – page 22 line 36 for support. However, Examiner was unable to locate the portions that discuss a third storage area containing the data of the TCP packet and no TCP headers, in relation to the first and second. Examiner respectfully requests Applicant to pinpoint all three storage areas within the '296 app and their use in correspondence with the claimed limitations, as Examiner was unable to locate them within the portions mentioned by Applicant.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

14. Claim(s) 30 rejected under 35 USC 101 since the claims are directed to non-statutory subject matter. Claim(s) 30 recites a “computer readable storage medium” which appear to cover both transitory and non-transitory embodiments. While Applicant’s Specification may or may not provide examples of a medium as claimed, such examples do not explicitly define the term. The United States Patent and Trademark Office (USPTO) is required to give claims their broadest reasonable interpretation consistent with the specification during proceedings before the USPTO. See *In re Zletz*, 893 F.2d 319 (Fed. Cir. 1989) (during patent examination the pending claims must be interpreted as broadly as their terms reasonably allow). The broadest reasonable interpretation of a claim drawn to a medium as claimed typically covers forms of non-transitory tangible media and transitory propagating signals *per se* in view of the ordinary and customary meaning of the term, particularly when the specification is silent of an explicit definition. See MPEP 2111.01. When the broadest reasonable interpretation of a claim covers a signal *per se*, the claim must be rejected under 35 U.S.C. § 101 as covering non-statutory subject matter. See *In re Nuijten*, 500 F.3d 1346, 1356-57 (Fed. Cir. 2007) (transitory embodiments are not directed to statutory subject matter) and *Interim Examination Instructions for Evaluating Subject Matter Eligibility Under 35 U.S.C. § 101*, Aug. 24, 2009; p. 2.

The Examiner suggests that the Applicant add the limitation "non-transitory" to the medium as recited in the claim(s) in order to properly render the claim(s) in statutory form in view of their broadest reasonable interpretation in light of the originally filed specification.

Priority

Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 119 or 120 as follows:

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed application, Application No. 10/005,536 (or any of the other prior applications for which benefit is claimed under 35 U.S.C. 119 or 120) fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application.

MPEP 201.07 recites, "The disclosure presented in the continuation must be the same as that of the original application." It appears that the disclosure for this specification contains subject matter not contained in the prior applications.

Accordingly, claims 4-7, 10-12, 14-16, 22, 24, 26-27, 31, 35-37 are not entitled to the benefit of the prior applications.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

15. Claims 4-7, 10-16, 22, 25-27, 31-33, 35-40 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Muller et al. (US 6480489).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 1, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Born (US 6631484) in view of Lawande et al. (US 6219697).

17. Regarding claim 1, Born disclosed a method of storing a portion of a packet in a host computer memory, comprising:

receiving a first packet at a communication interface (Born, col. 9, lines 37-39, Born disclosed monitoring for the presence of packets received by port 26/27);

receiving a second packet at said communication interface (Born, col. 9, lines 37-39, Born disclosed monitoring for the presence of packets received by port 26/27);

storing a header portion of said first packet in a hybrid storage area of a host computer (Born, Fig. 6, 88, col. 9, lines 39-42, Born disclosed placing the header in a FIFO);

if said first packet includes a data portion, storing said data portion in a data storage area of said host computer (Born, Fig. 6, 91, col. 9, lines 45-46, Born disclosed if the packet is a large-size packet, placing the data portion in buffer 77, 78, or 79); and

if said second packet is smaller than a predetermined size, storing said second packet in said hybrid storage area (Born, Fig. 6, 90, col. 9, lines 46-69, Born disclosed if it is determined that the packet is a small-size packet, the packet's data is placed in the FIFO).

Born further disclosed the packet transmission occurring over IEEE 1394 interface. Born did not explicitly state the packets to be TCP packets, having TCP headers.

In an analogous art, Lawande disclosed a method for operating the internet protocol over a high-speed serial bus in which the IEEE 1394 high speed serial bus provides the physical and link layer functions while the TCP serves as the transport layer (Fig. 5 and related portions of Lawande). As such, it was well known at the time the invention was made to communicate via TCP over an IEEE 1394 interface.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use TCP packets over the IEEE 1394 interface of Born thereby providing a scalable system that can be expanded across a larger network.

Claim 30 recites a computer readable storage medium storing instructions that when executed by a computer cause the computer to perform the method of claim 1. Born clearly disclosed a medium as claimed (see Figure 2 for example). Therefore, claim 30 is rejected under the same rationale.

Allowable Subject Matter

Claim 29 allowed.

Claims 2-3, 8-9, 18-21, 23, 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Amendment

Applicant's arguments and amendments filed on 8/04/2010 have been carefully considered but they are not deemed fully persuasive.

Summary of amendments

Applicant has narrowed the scope of independent claims 1, 17, 30, 37, by including new limitations.

Applicant has broadened the scope of independent claim 10, by removing a limitation to overcome the 112 1st rejection.

Independent claims 29 and 31 have not been amended.

As pointed out in the previous Office Action, Applicant has submitted a Request to Invoke Interference between the present application and Muller et al. (US Patent 6,480,489). The request for interference, filed 9/01/2009 has been acknowledged. However examination of this application has not been completed as required by 37 CFR 41.102(a). Consideration of a potential interference is premature. See MPEP 2303. Therefore, Applicant's arguments with reference to the Muller patent are moot in regards to whether Applicant's specification has support for the claimed subject matter.

Applicant states, "Applicants' provisional application 60/098,296 ("the '296 app.") says much the same thing with different words" [Response, 11]. In response, Examiner suggests that Applicant amend the claims and/or specification to use these "different words" in order to show the proper support to Applicant's own specification rather than attempting to claim the words of the Muller reference for which Applicant does not have support. For example, Applicant's specification does not appear to provide the proper antecedent basis for the term "hybrid storage area". It is recommended that limitations such as these be amended to reflect the terms in Applicant's Specification to provide proper support/antecedent basis.

In regards to the 112 1st rejections for claims 4-5, Applicant has failed to show support for the actual receipt of a code associated with the packet. Instead, Applicant's support disclosed that the header of the packet is fully parsed and its type is summarized into a status word. Summarizing a header's type into a single status word does not appear to equate to receiving a code that indicates that the data packet is re-assembleable or not.

Regarding the rejection for claims 6-7, Applicant argues, "receiving a code with said first packet does not necessarily mean receiving a code from the network with said first packet."

In response, Examiner notes, by Applicant stating that the limitation "does not necessarily mean" the interpretation of Examiner, Applicant is stating that there may be multiple meanings of the limitation and that Examiner's interpretation is reasonable. However, it has been shown that Applicant does not have the support for Examiner's

interpretation. It appears that Applicant may be claiming broader than what Applicant's Specification supports.

Applicant has amended claims 14-16 from "index" to "descriptor" and directs Examiner to the provisional, but does not provide any explanation to show how such is supported.

Regarding claim 22, Applicant's argues, "the "context number" disclosed in the mapped portions can be considered to be a "virtual connection identifier" without any explanation. The Examiner does not see how "free and in-use context numbers" relate to identifying a communication flow comprising said first packet or how such can be equated to a "virtual connection identifier".

Applicant has amended claim 30 to recite "non-transitory instructions". Whether the instructions themselves are non-transitory or not, the computer readable storage medium still has transitory embodiments, and as such, the rejection is respectfully maintained.

Applicant's arguments in view of Born are moot in view of the new grounds of rejection presented herein.

It is the Examiner's position that Applicant has not yet submitted claims drawn to limitations, which define the operation and apparatus of Applicant's disclosed invention in manner, which distinguishes over the prior art.

Failure for Applicant to significantly narrow definition/scope of the claims and supply arguments commensurate in scope with the claims implies the Applicant intends

broad interpretation be given to the claims. The Examiner has interpreted the claims with scope parallel to the Applicant in the response and reiterates the need for the Applicant to more clearly and distinctly define the claimed invention.

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Bret Dennison whose telephone number is (571) 272-3910. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger can be reached on (571) 272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/J Bret Dennison/
Primary Examiner, Art Unit 2443